

I. INTRODUCTION

A. Purpose

1. To enable a coordinated multi-department and multi-jurisdictional response to a snowstorm.

B. Scope

1. This plan is part of the Seattle Disaster Readiness and Response Plan (SDRRP) Volume II. It addresses the potential challenges posed by the following hazards:
 - a. Snow
 - b. Freezing Rain
 - c. Sleet
 - d. Ice
 - e. Roadway Frost

II. POLICIES

A. Authorities

1. See page 8, Seattle Disaster Readiness and Response Plan Volume I.

B. Limitations

1. The City will endeavor to make every reasonable effort to respond to a winter snowstorm. However, City resources and systems may become overwhelmed by the magnitude of the storm and its impacts. There is no guarantee implied by this Annex that a perfect response to a winter snowstorm will be practical or possible.

III. WINTER SNOWSTORM HAZARDS

A. Seattle Region

1. The Seattle region is subject to winter snowstorms that can cause significant and direct impacts to the transportation system, structures, water utilities and electrical utilities. Snowfall is not uncommon and can be heavy. Extended periods of below freezing temperatures are possible. High winds may also occur worsening the impacts of the snow and freezing temperatures. Some cascading impacts are:
 - a. Impassible streets
 - b. Frost on elevated roadway structures
 - c. Slower emergency response
 - d. Electrical power outages
 - e. Water service interruptions due to frozen or ruptured water mains
 - f. Closure or limited hours of operation for schools and public events
 - g. Cancellation of all but essential government services
 - h. Limited operation of public transit impacting transit-reliant citizens and their ability to access pharmaceutical, medical and basic commerce needs
 - i. Loss of business revenue

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- j. Increased risk of hypothermia and frostbite especially involving the homeless
- k. Increased need for public shelter assistance
- l. Canceled or reduced medical services
- m. Collapsed roofs
- n. Increased injury and illness from falls, carbon monoxide poisoning, heart attacks, vehicle accidents, sledding accidents, collapsing structures, falling ice and trees

IV. SITUATIONS AND ASSUMPTIONS

A. Storm characteristics

- 1. Where snow will accumulate, when it will occur and how much will fall is difficult to predict given the local geography and weather conditions.
- 2. Snow and ice may not melt for several days if the temperatures remain below freezing.

B. Planning Assumptions

- 1. There is not sufficient ice and snow removal capability to clear every residential streets or secondary arterials in Seattle. In a severe storm it may be difficult to keep even a limited number of primary routes passable.
- 2. The hilly terrain in Seattle can make driving difficult and may temporarily isolate neighborhoods.
- 3. The unexpected arrival of a storm during the morning or afternoon commute or during a special event can result in stranded mass transit commuters, motorists and students.
- 4. The uncertainty regarding a forecast may cause response agencies and the community to assume the worst when it comes to preparing for a predicted storm.
- 5. The longer streets remain impassible, the greater the impact to the community, especially to vulnerable populations.
- 6. Public transportation services are often impacted by winter snowstorms.
 - a. The loss of, or reduction in, public transportation services may especially impact the elderly and disabled who depend upon taxi or bus services for transportation to medical appointments, the pharmacy and the grocery store
 - b. Bus routes may be passable in one community and not in another making it difficult to maintain transit service
 - c. Transit agencies may have to modify their service level on short notice because of worsening road conditions which could potentially impact thousands of commuters.
 - d. Passengers on trains, cross country buses and private vehicles may become stranded in Seattle and request assistance with obtaining shelter and food
- 7. The response to a significant incident, such as a major fire, earthquake or terrorist attack, could be hindered.
- 8. Use of grills for heat or cooking inside a house or apartment creates a risk of death from carbon monoxide for the occupants. Deaths from carbon monoxide have occurred in previous storms.
- 9. Loss of electrical power could increase the need for shelters.

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10. The ability of police officers, firefighters, dispatchers, medical staff, shelter staff and other essential personnel to get into work may impact critical service delivery.
11. Evacuation of a health care facility would be complicated by the weather and road conditions.
12. Businesses and residents generally do not clear the sidewalks in front of their facility or home which limits access to goods and services.
13. Traffic congestion and parked vehicles related to the snowstorm may significantly delay Seattle Department of Transportation efforts to clear snow and ice from the street or prevent crews from reaching a specific critical location in need of emergency plowing\decing.

V. CONCEPT OF OPERATIONS

A. Triggers for Initial Planning Activity

1. A National Weather Service forecast of snowfall and or sleet within the City.
2. Factors to consider are amount of snow predicted, the anticipated duration of the storm, time and day of week it might occur, winds and temperatures.

B. Triggers for Activation of the Emergency Operations Center

1. The decision to activate the Emergency Operations Center for a winter snowstorm will be based on the anticipated severity of the storm, potential impacts and the ability of the City to respond to those impacts.
2. The level of activation will be tailored to meet the anticipated challenges posed by the storm. Modes of activation are:
 - a. Increased Readiness
 - b. Major Incident
 - c. Disaster
 - d. Catastrophic

C. Weather Forecast

1. The City of Seattle relies upon the National Weather Service for winter snowstorm forecasts.
 - a. Seattle Department of Transportation, Seattle Public Utilities, City Light and Seattle Office of Emergency Management and others closely monitor weather forecasts on a routine basis
 - b. Seattle Department of Transportation also contracts with NW-Weathernet, a private weather forecasting service
2. For winter snowstorms expected to have a significant impact to the Puget Sound region the National Weather Service hosts a webinar to review the forecast and provide an opportunity for response agencies and local jurisdictions to ask questions.
 - a. The Seattle Office of Emergency Management, Seattle Department of Transportation, Seattle Public Utilities and Seattle City Light participate in the webinar
 - To prevent overload of the webinar, any City Department that wishes to participate in the webinar is welcome to do so at the City Emergency Operations Center

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D. Notification

1. The Seattle Office of Emergency Management will notify all departments and partner organizations about the forecast and anticipated next steps.
 - a. Departments are expected to notify their employees
 - b. In an emergency, the Seattle Office of Emergency Management Duty Officer can send a city-all email

E. Initial Planning

1. If the forecast indicates minimal impacts to the City, the Director of the Seattle Office of Emergency Management will have the option to convene an initial planning meeting.
2. If the forecast indicates impacts to the City may be significant, the Director of the Seattle Office of Emergency Management will convene a winter snowstorm initial planning meeting.
 - a. The meeting will be attended by, at minimum, representatives from:
 - Seattle Department of Transportation
 - Seattle Police Department
 - Seattle Fire Department
 - Public Health Seattle and King County
 - Seattle Public Utilities
 - Seattle City Light
 - Human Services Department
 - Parks Department
 - Facilities and Administrative Services
 - Seattle Joint Information Center
 - Seattle Public Schools
 - King County Metro Transit
3. The planning meeting agenda will include a review of the weather scenario, identification of potential impacts, development of City objectives, an update to the response and public information strategies, establishment of Emergency Operations Center activation status and hours of operation and identification of outstanding policy issues.

F. Strategy

1. The response strategy for a winter snowstorm hinges on the ability of the Seattle Department of Transportation, and other transportation agencies in the region, to keep the roadways passable. All departments should support Seattle Department of Transportation in fulfilling its mission.
2. Seattle Department of Transportation snow and ice clearing strategy.
 - a. Maximize available resources to conditions using three levels of service:
 - Maintain driving conditions at service level 1, 2, or 3 on all snow routes as long as practical before transitioning to a combination of driving condition service level 1, 2 or 3 depending on emergent necessity.

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- Level 1: Bare pavement within 12 hours over all lanes on 310 miles of critical arterials as soon as there is a lull in the storm
 - Level 2: Bare pavement for one lane in each direction within 12 hours on selected major arterials and remaining King County/Metro Transit (Metro) winter snowstorm bus routes. As equipment and weather conditions permit achieve bare pavement on all lanes of Service Level 2 routes
 - Level 3: De-ice hills, curves, bridges and controlled intersections as soon as there is a significant lull in the storm
- b. Snow plows will direct snow towards the right sides of streets
- c. Apply an enhanced salt brine solution to designated routes when snow is predicted with 50 percent or greater probability
- This can take several hours to complete; rainfall preceding a snow storm can decrease its effectiveness
- d. Once snow and ice have accumulated, move to a deicing approach using granular salt. Using abrasives like sand is important for areas where additional traction is necessary: hills, curves and stopping zones
- e. Seattle Department of Transportation will deploy pedestrian safety crews to perform deicing and snow removal on critical sidewalk landings and public stairways located in the right-of-way, as identified using criteria in the city's Pedestrian Master Plan criteria
- f. A Seattle Department of Transportation special emphasis crew will address emergent needs and problem spot locations as reported by Seattle Police Department, Seattle Fire Department, Public Health, Metro and transportation field staff
- g. Although steel plow blades are available for use on compacted snow and ice, use will be strictly managed due to safety hazard presented to operator and only implemented when life safety response warrants
- h. To maintain bus service, and to avoid stranding commuters, the Seattle Department of Transportation and regional transit agencies closely coordinate to ensure roads are cleared around pre-designated high priority routes, bus stops and transit turn-around points
- i. Closure of the Viaduct, West Seattle Bridge or other critical transportation routes may be done for safety reasons and to provide Seattle Department of Transportation unrestricted access to apply anti-deicing solutions and to plow the roadway structure.
- During a storm, higher priority calls for service may limit the ability of the police department to support a such closure
 - Seattle Public Utilities and Seattle City Light crews may be requested to temporarily augment the police department in closing access to a critical arterial street in an emergency
- j. The Seattle Department of Transportation may close designated City streets for safety reasons
- Seattle Department of Transportation stages street closure signs at known problem areas

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- Seattle Police officers may close streets as needed for safety reasons or operational needs
 - All streets closures must be reported promptly to the Seattle Department of Transportation for documentation on the Master Road Closure List
 - The Seattle Police Department may be requested to provide emergency escort of Seattle Department of Transportation vehicles. The police department has a limited capability to provide escorts
 - The police department may decline an escort request due to safety or hazard concerns, resource availability or higher priority calls for service
3. Washington State Department of Transportation has the option to close the I-5 Express Lanes or restrict access to transit and emergency vehicles.
 - a. Closure or restriction of the Express Lanes may cause substantial traffic congestion in the City
 - Washington State Department of Transportation will coordinate with the City of Seattle prior to making the decision to close or restrict access to the Express Lanes
 - b. Restricting Express Lane access to transit and emergency vehicles requires close coordination between the following departments and agencies
 - Washington State Department of Transportation
 - Washington State Patrol
 - King County Metro and Sound Transit
 - King County Emergency Coordination Center
 - Seattle Office of Emergency Management
 - Seattle Department of Transportation
 - Seattle Police Department
 4. King County Metro Transit and Sound Transit will modify service levels as needed and communicate that information to the Seattle Department of Transportation.
 - a. Depending on current weather conditions and the inherent limitations of winter snowstorm forecasting, this decision may not be made until a few hours prior to the arrival of the storm
 5. The Seattle Public Schools will determine if schools will close or be on modified hours of operation and provide that information to the Seattle Office of Emergency Management or Emergency Operations Center when activated.
 - a. Depending on current weather conditions and the inherent limitations of winter snowstorm forecasting, this decision may not be made until a few hours prior to the arrival of the storm
 - b. The City Emergency Operations Center, when advised of an early closure of public schools, will notify Seattle Department of Transportation
 6. Joint Information Center public messaging will focus on:
 - a. Safety
 - b. How prevent damage to property and infrastructure
 - c. How to report damage

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- d. How to obtain services
- e. Status of efforts to clear the roads
- f. Broadcast public reminders to property owners regarding their obligation to remove snow and ice from sidewalks in front of their property
- g. Sufficient supplies and medicines on hand (3 Days\3 Ways message)
- 7. To minimize impacts to vulnerable populations and critical services during the storm, electrical, water, gas outages will be promptly reported to the City Emergency Operations Center and Public Health Seattle and King County.
 - a. During a storm, even a small outage may significantly impact a health care facility and potentially cause cascading impacts

G. Coordination

- 1. Mild Snow\Ice Events
 - a. No Activation required or activate the City Emergency Operations Center to Increased Readiness Mode.
 - At minimum, the Seattle Office of Emergency Management Staff Duty Officer will monitor the weather and is available 24/7 to assist City Departments
 - An initial planning meeting may be held to support coordination between departments
 - Dispatchers, Duty Officers, Street Supervisors will coordinate information and operations between departments as is done routinely on a daily basis
 - As needed, the Seattle Office of Emergency Management may provide weather forecasts, situation updates and coordinating information to all City departments and partner organizations
 - b. Mild snow and ice events may only require a limited or focused response by Seattle Department of Transportation as defined in the current Snow and Ice Plan, Appendix A, Snow and Ice Response Matrices
- 2. Winter Snowstorm – Activation of Seattle Emergency Operations Center.
 - a. The Director of the Seattle Office of Emergency Management will coordinate the decision for activation of the Emergency Operations Center
 - Department Operations Centers and the City Emergency Operations Center activation levels will be tailored, as needed, based on the challenges anticipated for the winter snowstorm response
 - b. When the City Emergency Operations Center is activated:
 - A Consolidated Action Plan will be used to coordinate operations throughout the City
 - The Essential Elements of Information list will guide departments in what information to report the storm and their response operations, when those reports should be provided and how they will be shared
 - WebEOC will be used for sharing information and updates with all City departments
 - c. The Mayor's Office is responsible for determining policy on closure, late opening or early closing of City facilities, employee leave and citywide employee messaging

VI. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. All Departments

1. Initial Planning and Preparation.
 - a. Ready department resources for the response to the snow storm, including four wheel drive vehicles, tire chains and windshield fluid
 - b. Take steps to mitigate impact of the storm to service delivery, critical infrastructure and key resources
 - c. When requested, participate with Seattle Office of Emergency Management and other City Departments in planning the storm response
 - d. Notify Seattle Office of Emergency Management if Department Operations Center will be activated, when and at what level of activation and what support is needed from the EOC
 - e. Following guidance provided by the City EOC and in coordination with the Mayor's office, provide employees with updates on storm preparations, as needed
 - f. Coordinate pre-incident City public messaging as defined in initial planning meeting
2. Response (Emergency Operations Center Activated).
 - a. Coordinate public messaging through the Joint Information Center
 - b. Coordinate employee messaging, leave policy and modification of hours of department operation through the Mayor's Office
 - c. Coordinate policy issues through the Seattle Emergency Operations Center Director.
 - d. Coordinate all storm related mapping through the City Emergency Operations Center Planning Section
 - e. Use Web EOC to share information
 - f. Route requests for emergency plowing in support of critical operations to the Seattle Department of Transportation
 - g. Notify the City Emergency Operations Center and Seattle Department of Transportation if road conditions deteriorate and significantly hinder response operations or delivery of services
 - h. Notify Seattle Emergency Operations Center when Department Operations Center activates
 - i. Notify City Emergency Operations Center of any emergency lodging arrangements for department personnel.
 - j. Notify City Emergency Operations Center of any fatality or significant injury related to the storm
 - k. Closely monitor supply levels and usage rate of wiper blades, windshield washer fluid and tire chains and notify Emergency Operations Center Logistics Section well before critical supplies run low or are expended

B. Emergency Support Function 1 Transportation (Department of Transportation)

1. Initial Planning and Preparation.

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- a. Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to Transportation Department service delivery and impacts to public transit in Seattle and region
 - b. Closely coordinate preparations with King County Metro Transit, Sound Transit and other transportation agencies in the region
 - Determine Washington State Department of Transportation strategy for Express Lane operation
 - c. Provide estimate, based on forecast and available resources, of potential impacts to driving conditions and anticipated Service Level (1, 2 or 3 or other) on snow routes and update according to the Essential Elements of Information strategy
 - d. Coordinate with Seattle Police Department to ensure sufficient street closure signs are available and distributed to designated locations throughout the City
 - e. Notify Seattle Police Department and King County Metro Transit of anticipated need for assignment of Liaisons – update the Emergency Operations Center when liaisons are activated
 - f. In coordination with City pre-incident public messaging strategy, develop and disseminate public messaging regarding transit services
 - g. Determine need to assign a King County Metro Transit Liaison to the Seattle Department of Transportation Department Operations Center
 - h. Ensure Seattle Public Schools notifies the Emergency Operations Center of any school closures or modification to hours of operation.
2. Response (Emergency Operations Center Activated).
- a. Closely coordinate operations with King County Roads Division, Washington State Department of Transportation, other transportation agencies in the region, King County Metro Transit, Sound Transit and other transit agencies to support transit operations
 - b. Notify the Seattle Emergency Operations Center of any changes in King County Metro service levels
 - c. Coordinate requests to King County Metro Transit for heavy duty tow service, on an emergency and as available basis, for fire trucks
 - d. Closely coordinate operations with Seattle City Light to determine priority of handling downed power lines so key transportation routes can be reopened in a timely manner
 - e. Provide regular and frequent updates to the City Emergency Operations Center on road conditions, the status of storm operations and problems encountered
 - Maintain and update online mapping system
 - , Maintain and update the Master Street Closure List
 - f. Ensure Seattle Public Schools notifies the Emergency Operations Center of any changes in school bus schedules, students sheltered at schools or students stranded on buses.
 - g. Rapidly address requests for emergency street clearing from the Police Department, Fire Department ,Public Health Seattle and King County or others
 - Assign highest priority to, and at the expense of snow plan operations if necessary, supporting life safety requests for assistance such as mass casualty incidents, hostage situations and fires

C. Emergency Support Function 3 Public Works and Engineering (Seattle Public Utilities)

1. Initial Planning and Preparation.
 - a. Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to water, waste water and solid waste service delivery
 - b. In coordination with City pre-incident public messaging strategy, develop and disseminate public messaging regarding frozen or burst water pipes and solid waste pickup
2. Response (Emergency Operations Center Activated).
 - a. As needed, activate Department Operations Center to coordinate internal operations and with other departments
 - b. Notify the City Emergency Operations Center and Public Health Seattle and King County of significant water or sewer service outage, outages known to impact a health care facility or if solid waste pick up will be delayed
 - c. Be prepared to provide equipment and crews to assist with snow and ice removal in support of Seattle Department of Transportation operations

D. Emergency Support Function 4, 9, 10 Firefighting, Search and Rescue, Oil and Hazardous (Seattle Fire Department)

1. Initial Planning and Preparation.
 - a. Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to Fire Department service delivery
 - b. Coordinate with Public Health Seattle and King County on public messaging regarding carbon monoxide poisoning
2. Response (Emergency Operations Center Activated).
 - a. As needed, activate Department Operations Center to coordinate internal operations and with other departments
 - b. Immediately notify the Emergency Operations Center of developing critical incidents with a potential for cascading impacts
 - c. Maintain capability to respond calls for service
 - Notify City Emergency Operations Center if trends develop which indicate emergency calls for service may be significantly delayed Contact Seattle Department of Transportation to request emergency plowing assistance
 - For fire trucks that become stuck in the snow consider requesting heavy duty tow trucks from King County Metro

E. Emergency Support Function 5 (Emergency Management)

1. Initial Planning and Preparation.
 - a. Monitor and notify, as needed, City department and regional partners about the potential for a winter snowstorm
 - b. Host the National Weather Service Webinar at the City Emergency Operations Center and notify City departments of the Webinar forecast

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- c. Facilitate the City initial planning meeting
- d. In coordination with the Mayor's Office, define City public and employee messaging strategy
- e. Provide regular updates, as needed, to City departments on the storm forecast, potential impacts, storm preparation activities and anticipated response operations.
- f. Coordinate development and distribution of the City Consolidated Action Plan and Essential Elements of Information guide
- g. Configure WebEOC (Base and Sub-Incidents)
- 2. Response (Emergency Operations Center Activated).
 - a. Assign Office of Emergency Management Duty Officers to general staff positions in the Emergency Operations Center
 - b. Update Essential Elements of Information guide as needed
 - c. Develop and distribute Snapshot and Situation Reports
 - d. Monitor and provide updates on the status of rail, intercity bus service, taxi, marine and air transportation providers
 - e. Coordinate response mapping
 - f. Develop and distribute Consolidated Action Plans
 - g. Coordinate with King County Emergency Management
 - h. Coordinate public and employee messaging through the Joint Information Center
 - i. Coordinate Auxiliary Communication Service operations

F. Emergency Support Function 6 Mass Care, Housing and Human Services (Seattle Human Services Department)

- 1. Initial Planning and Preparation.
 - a. Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to vulnerable populations, human service agencies and Parks Department programs and services
 - b. In coordination with City pre-incident public messaging strategy, develop and disseminate public messaging regarding warming shelters and other related topics
 - c. In coordination with Parks Department develop and maintain list of locations and capacity of current and potential warming shelters
 - d. With support from Finance and Administrative Services, arrange for front or four wheel drive vehicles, chains etc for outreach workers
- 2. Response (Emergency Operations Center Activated).
 - a. Monitor human services agencies ability to deliver services
 - b. Coordinate establishment of shelters as needed
 - c. Monitor transportation systems that support vulnerable populations and notify City Emergency Operations Center of developing issues
 - d. Be prepared to provide Parks Department equipment and crews to assist with snow and ice removal in support of Seattle Department of Transportation operations

G. Emergency Support Function 7 Resource Support (Finance and Administrative Services)

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1. Initial Planning and Preparation.
 - a. Review and update list of department vehicle coordinators and emergency purchase or rental procedures
 - b. Assist departments with preparing vehicles and facilities
 - c. Review and update inventory of winter snowstorm supplies such as chains, wiper blades, fluid, snow shovels, and salt
 - d. Ensure emergency generators are ready
 - e. Notify departments of hours of operation for vehicle maintenance shops
 - f. Ensure Finance and Administrative Services supported facilities have sufficient winter storm supplies per plan
2. Response (Emergency Operations Center Activated).
 - a. Closely monitor reports from departments on their use of winter snowstorm supplies windshield wipers, windshield fluid and chains, and arrange for resupply as needed
 - b. Assess facilities for potential damage

H. Emergency Support Function 8 Public Health and Medical Services (Public Health Seattle and King County)

1. Initial Planning and Preparations.
 - a. Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to healthcare community
 - b. In coordination with City pre-incident public messaging strategy, lead the development and dissemination of carbon monoxide warning messages
 - c. Develop and distribute other relevant health alerts according to public information strategy
2. Response (Emergency Operations Center Activated).
 - a. As needed, activate Health and Medical Area Command to coordinate internal operations and with other jurisdictions and departments.
 - b. Monitor emergency room services, blood bank, dialysis centers and other critical healthcare services for potential disruption and notify City Emergency Operations Center
 - Rapidly evaluate impact of utility service interruptions on affected health care providers
 - Monitor Seattle City Light System Status website
 - c. Immediately notify the Emergency Operations Center of developing critical incidents with a potential for cascading impacts
 - Closely monitor and report number of carbon monoxide cases
 - Notify Seattle Joint Information Center
 - d. Address, and if needed, route to the City Emergency Operations Center for assistance, requests for non-medical logistical support from health care providers
 - e. Coordinate messaging through the Seattle Joint Information Center with Health Department as lead for messaging related to Carbon Monoxide poisoning

I. Emergency Support Function 12 (Seattle City Light)

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1. Initial Planning and Preparation.
 - a. Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to electrical service delivery
 - b. In coordination with City pre-incident public messaging strategy, develop and disseminate public messaging regarding power outages
2. Response (Emergency Operations Center Activated).
 - a. As needed, activate Department Operations Center to coordinate internal operations and with other departments
 - b. Notify the City Emergency Operations Center and Public Health Seattle and King County of significant interruptions to electrical service delivery
 - c. Closely coordinate with Seattle Department of Transportation to determine priority for clearing downed power lines so key transportation routes can be reopened in a timely manner
 - d. Be prepared to provide equipment and crews to assist with snow and ice removal in support of Seattle Department of Transportation operations

J. Emergency Support Function 13 (Seattle Police Department)

1. Initial Planning and Preparation.
 - a. Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to Police Department service delivery
 - b. Coordinate Seattle Department of Transportation Department and determine if or when a Police Department Liaison will be needed in the transportation operations center
 - c. Coordinate with Department of Finance and Administrative Services regarding extended hours of operation at Charles Street and Haller Lake facilities to support emergency vehicle chain up
 - d. Inventory cache of street closure signs stored at precincts and request replacements as needed from Seattle Department of Transportation
2. Response (Emergency Operations Center Activated).
 - a. As needed, activate Department Operations Center to coordinate internal operations and with other departments
 - b. Assign priority to requests from Seattle Department of Transportation or Metro for assistance with abandoned vehicles impacting snow and bus routes
 - c. Immediately notify the Emergency Operations Center of developing critical incidents with a potential for cascading impacts
 - d. Maintain capability to respond emergency calls for service
 - Notify City Emergency Operations Center if trends develop which indicate emergency calls for service may be significantly delayed Contact Seattle Department of Transportation to request assistance with vehicle access to police facilities and emergency plowing assistance
 - e. Be prepared to assist if resources allow, with implementing the plan to restrict Express Lane access to emergency and transit vehicles
 - Requires assignment of officers to traffic control posts at on ramps

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- f. If resources allow, and if deemed safe to do so, provide escort of Seattle Department of Transportation vehicles
- g. If resources allow assist with closure of critical transportation routes such as the Viaduct, West Seattle Bridge or others
- h. Provide regular and frequent updates to the Seattle Department of Transportation on locations of closed roads using SharePoint
- i. When requested, provide report on weather, road conditions and snow depth, to the Seattle Department of Transportation and the City Emergency Operations Center via the Seattle Police Department Dispatch Center or the Operations Center.
- j. When requested, assign a liaison from Traffic (or Patrol if not available) to the Seattle Department of Transportation
- k. When requested, assist with locating and reporting the location of abandoned buses

VII. ADMINISTRATION AND LOGISTICS

The Seattle Office of Emergency Management will have primary responsibility for this annex and will ensure it is reviewed on a regular basis and updates made as necessary to ensure guidance contained in this document remains current.

VIII. REFERENCES

- A. Seattle Disaster Readiness and Response Plan Volume I and II
- B. Seattle Hazard Identification and Vulnerability Analysis
- C. 2010-2011 Seattle Department of Transportation Snow and Ice Readiness and Response Plan
- D. King County Comprehensive Emergency Management Plan
- E. 2008 Winter Storm Corrective Action Plan

IX. DISTRIBUTION LIST

- A. One electronic copy to each of those organizations identified in the distribution list in Tab D of the Basic Plan with some modification for recent changes in City organization.
- B. One electronic copy to King County Emergency Management, King County Metro and Sound Transit, Seattle Public Schools and Puget Sound Energy.
- C. Departments are encouraged to share this plan with partner organizations as needed.
- D. A copy of this plan is posted on the Seattle Office of Emergency Management internal website.
- E. A copy of this plan is stored in the regional SharePoint accessible by most City departments.

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- A. Seattle Office of Emergency Management Winter Weather Checklist
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E. Seattle Department of Transportation Snow Response Routes

Appendix A: Forecasted Winter Storm Communications Strategy

Purpose

This communications strategy describes how public messaging coordination between departments will occur before a forecasted winter storm arrives.

Several City departments provide information to the public when a storm is forecast. To support a unified effort, a more coordinated approach to public messaging is needed for the time period between the initial storm forecast and activation of the City Emergency Operations Center.

Volume II of the Seattle Disaster Readiness and Response Plan describes how public messaging will be coordinated under Emergency Support Function (ESF) 15, External Affairs. This plan is an appendix to the Snowstorm Incident Annex of the City plan.

Scope

This plan applies to all City Public Information Officers and other related staff.

Coordination

The Mayor's Director of Communications is responsible for leading the coordination of public messaging for the City. The Director of Communications may designate a Public Information Officer to supervise implementation of this plan. The trigger to consider implementation of this plan is a National Weather Service winter storm forecast with a potential for significant impacts within the City of Seattle or Seattle City Light or Seattle Public Utility service areas. This communications strategy will be followed until canceled by the Director of Communications or until activation of the Emergency Operations Center Joint Information Center (EOC/JIC).

The Seattle Office of Emergency Management, upon notification of the forecast, will convene an initial planning meeting. Meeting participants will include at minimum:

- Mayor's Office
- Mayor's Office Director of Communication
- Seattle Office of Emergency Management Staff
- Seattle Department of Transportation
- Seattle Police Department
- Seattle Fire Department
- Public Health Seattle and King County
- Seattle Public Utilities
- Seattle City Light
- Human Services Department
- Parks Department
- Facilities and Administrative Services (Includes Customer Service Bureau)
- Seattle Joint Information Center Supervisor
- Seattle Public Schools
- King County Metro Transit

During the initial planning meeting this pre-storm communications strategy, in addition to other issues, will be reviewed and updated as needed. Responsibility for a particular message may fall to more than one department. In that instance, the lead department for that message will be designated during the planning meeting.

If the decision is made to implement this strategy the Director of Communications will notify the Public Information Officers group.

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- The Mayor's office maintains an Outlook email group for notifying all Public Information Officers in the City (MO_PIO_Contacts@seattle.gov)

Under this plan department Public Information Officers will:

- Notify the Director of Communication and each other about potential storm related department press conferences, photo opportunities, media interviews or conference calls\meetings with other jurisdictions in the region.
- Post on WebEOC summaries of significant media contacts, copies of press releases issued, maps provided to the public or media and schedules for press conferences, photo opportunities or interviews.
 - Emergency Management will create a WebEOC winter storm incident for exchanging information on storm preparations which includes public messaging.
 - This WebEOC incident will be created after the conclusion of the initial planning meeting.
- In coordination with the Director of Communication, share storm related media information with neighboring jurisdictions Regional Public Information Network is a common vehicle to achieve this).
- Monitor applicable blogs and report any significant trends to the Director of Communications and each other.
- Notify the Director of Communications and each other of possible activation of a Call Center.
- Provide recommendations to the Director of Communications on if or when to activate the City emergency website (does not require EOC activation).

Common public message topics may include:

- | | |
|---|--|
| • Warning on carbon monoxide poisoning | • Modifications to transit service schedules |
| • Warning about downed power lines | • Provide personal preparedness information |
| • How to report utility service outages | • Hours of operations for City services |
| • How to report water main breaks and downed power lines. | • Warming shelter locations and hours of operation |
| • Review of anticipated winter response operations, by department | • Information about potential for landslides and actual landslides |
| • Request for the public to help keep street drains clear | • Where to obtain information about the storm and City response operations |
| • Request the public to shovel the sidewalks in front of their home and\or business | • Where to obtain storm related assistance from City departments |
| • Reminders to use caution with open flames such as candles | • Reminder to obey road closed signs |
| | • Reminder to check on your neighbor |

Tab A: Citywide Coordination Checklist

Triggers for Initial Action:

- “Winter Weather Advisory” issued by National Weather Service; freezing rain and/or snow anticipated in the lowlands
- 32 degrees freezing temperatures sustained for 2-days straight (daytime temps don’t rise above freezing)
- Rainfall of greater than 2-3 inches in 24 hour period causing urban flooding and impacts at known sites
- “Wind Advisory” issued by National Weather Service; sustained winds 25 to 39 mph and/or gusts to 57 mph
- USGS landslide threshold; increased landslide hazards and City landslide coordination occurring

Preparedness (Hazard Assessment, Situational Awareness, Initial Protective Actions)

- ❑ **Prepare for Initial Planning Meeting****OEM**
 Gather short and long-term weather forecast -identify the onset, type, severity and duration, and accumulation to occur (snow, ice, high winds, severe cold temperatures), gather SDOT, SCL and SPU’s specific weather analysis and their assessments on impacts to respective infrastructure and systems, identify planned events, conduct initial briefing with SDOs to prep for planning meeting, arrange for meeting room/conference bridge use, send out initial meeting notification to Dept Reps/ attendees
- ❑ **Conduct Initial Planning Meeting****OEM (lead) & All Departments (Dept Reps/Agencies and ESFs)**
Recommended Attendees: SDOT, SCL, SPU, Police, KC Metro, Human Services, Public Health, Fire, Parks,
Agenda:
- Review weather forecast
 - Review list of upcoming planned events
 - Update list of where people can go to get warm; confirm with sites they will be open; post and disseminate list
 - Identify potential impacts (power outages, health care facilities without heat, homeless, at risk populations)
 - Identify any “Customer Care” concerns and issues
 - Review EOC standard “Common Operational Objectives” and update, as needed along with identifying strategies:
 1. Develop and maintain situational awareness.
 2. Develop and implement city-wide strategy for response and recovery.
 3. Coordinate communications between city departments, external agencies and the community.
 4. Promote unity of effort with City Departments and external agencies.
 5. Address impacts to community in comprehensive manner.
 - Identify actions expected and/or underway
 - Determine if any initial assistance/resources needed
 - Determine plan for coordinating public information
 - Communicate key safety and department preparedness messages to public
 - Identify contacts and method(s) between jurisdictions for coordinating and/or sharing the release of statements

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- Develop strategy to outreach to all sectors of community
- Provide key contact departmental numbers and weblinks
- Develop standard list of key messages for the Mayor to deliver
- Identify any policy concerns and/or issues – Assemble / Notify Emergency Executive Board as needed
- Address procedures on reimbursement for response costs
- ❑ **Develop and Distribute initial Consolidated Action Plan.....**
OEM
Partners such as community organizations, schools, hospitals, and chamber/business partners
- ❑ **Create WebEOC incident and send notice to DMC/Dept Directors, etc.....****OEM**
- ❑ **Report on Preparatory Steps Being Taken** **All Departments**
- ❑ **Activate necessary Department Operation Centers (DOCs).....** **OEM & All Departments**
 - Notify OEM Staff Duty Officer (SDO) / EOC when activated
 - Establish communications
 - Identify initial actions
- ❑ **Notify Auxiliary Communications Service (ACS) Team****OEM**
- ❑ **Communicate with City employees.....** **OEM Director, Department Directors & Policy**
Mayor communicates expectations of employees and directs Dept Directors to adjust necessary staffing levels
- ❑ **Track costs** **OEM & All Departments**
Items: Emergency protective measures and potential uninsured property damage; potentially ensure post-event reimbursement.

Response (Activation, Notifications, Operational & Planning Actions)

- ❑ **Activate EOC** **OEM, Departments & Policy**
 - Department Representatives (recommended): SDOT, SCL, SPU, Police, Fire, HSD, Public Health, Parks, Transit
 - Coordinate city-wide response and recovery efforts
 - Notify Mayor, Council and policy levels
 - Request ESF and Department representatives
 - Request activation of joint information system and center
 - Notify departments, King County, WA State, partners
 - Establish communications and check-in with activated DOCs
 - Confirm activation timeframe, operational periods and staffing needs
- ❑ **Establish contact with partner agencies as well as Departments** **OEM & All Departments**
- ❑ **Establish situational awareness and analysis** **OEM & All Departments**
 1. What is the situation?
 2. What are the impacts?
 3. What are we doing about it?
 4. What are your unmet needs and the urgency of those needs?
 5. Are you mobilizing beyond current on-duty personnel? If yes, specify.
 6. Are you able to maintain normal service delivery? If not, what has changed?
 7. What information needs to be shared with public?
 - Develop/Update Essential Elements of Information and disseminate; monitor weather

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- Identify current and anticipated impacts to department operations
- Identify department operations affecting/affected by other department operations
- Identify current and anticipated impacts to homes, business, critical infrastructure, etc.
- ❑ **Establish Consolidated Action Planning process..... OEM & All Departments**
 - *Mission:* The mission of the Seattle EOC is to minimize the impact of emergencies and disasters on the community through coordinated planning, information-sharing and resource management between all City departments, partnering agencies and the public.
 - Identify and/or modify objectives

Emergency Operations Center – Section Responsibilities

Planning Issues (anticipate the near and long term needs)

- ❑ Continued weather forecast
- ❑ Anticipated service level disruption – (including Libraries, Neighborhood District Centers, School District)
- ❑ Contingency plans (power outage, transit disruption, special event impacts, loss of heating/water flow at health care facilities/critical infrastructure, cold temps for homeless population and at risk population outreach and impacts)
- ❑ Anticipated “Customer Care” issues and concerns
- ❑ Policy decisions list
- ❑ Transitions within the EOC (staffing, rehab, IT, etc.)

Public Information Issues (strategize, anticipate needs, and confirm how information is getting to the right people)

- ❑ Carbon monoxide poisoning prevention & power outage safety
- ❑ Waste management issues / garbage services
- ❑ Sites to get warm / If opened, shelter locations and hours of service
- ❑ Services open (or closed). Phone number/web site/contact for more information or to report information.
- ❑ Encourage citizens to check on one another and vulnerable neighbors
- ❑ Maintain and update list of key messages for the Mayor to deliver

ESF/Operational/Logistical Issues (creative, collaborative problem-solving)

- ❑ Confirm SDOT and King County Metro Transit Memorandum of Understanding is implemented; exchange of liaisons
- ❑ FAS/Maintenance staff support SPU, SPD, SFD; Adequate fueling capacity and diesel impacts and chain and salt supplies
- ❑ Determine overall city-wide lodging/hotel management and food service for operational city workers Address employee transportation options (city vehicles, staff with 4x4s, cross-department coordination)
- ❑ Maintain employee worker safety messages – reporting to work, preparedness, medications, etc.
- ❑ Need for claims adjustors
- ❑ Vulnerable populations concerns (elderly, SHA facilities, homeless, English not a primary language, etc.)
- ❑ Shelter locations – media, King County hot line, City web page
- ❑ Shelter types – overnight, warming, recharging sites, pet, alternate care facilities, severe weather shelters for homeless
- ❑ Deployment of generators and ongoing fueling (Use of District Service Centers to post information regularly)

Recovery (Service Levels, Individual/Community Assistance, City/Public Agency Assistance, Economic/Business Resumption)

- ❑ **Conduct Hotwash.....OEM & All Departments**

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- ☐ **Disseminate After Action Report/Improvement Plan instructions.....OEM & All Departments**
- ☐ **Demobilize and notify DMC, Dept Directors, appropriate agencies OEM & All Departments**
Department Operations Centers and Emergency Operations Center
- ☐ **Prepare costs and documentation OEM & All Departments**
Anticipate of federal/state cost recovery
- ☐ **Notify the public and agencies of return to normal service.....OEM & All Departments**

Tab B: Essential Elements of Information for Snow Storm Operations

Roadway Snow and Ice Treatment (SDOT)

Anti-icing

- When are anti-icing operations scheduled to commence?
- What roadway structures, street segments, and targeted areas will be covered?
- When are anti-icing operations scheduled to conclude?
- How is the effectiveness of the anti-icing strategy determined?

Overview of driving conditions

- What are the street conditions of designated Service Level 1, 2, and 3 snow routes?
- What is the condition of hill street segments?
- What is the condition of roads not identified as Level I, II, III?

Status of street closures in effect or anticipated

- Are street closures being entered and updated in the SharePoint street closure list?
- What are the critical/major street closures?
- What is the surface condition and status of the Viaduct?
- What is the surface condition and status of the West Seattle Bridge?
- What treatments and/or actions are taking place on these and other elevated roadway structures?

Resource status

- How many plows, sanders, anti-ice vehicles are currently in operation?
- What are the anticipated operational strategies for the upcoming operational period?
- Have contractors been hired to augment SDOT resources?
- Have mutual aid plowing resources been requested?
- Has SDOT received any requests to provide mutual aid plowing?

Transit Bus and Van Service

Operations

- Is Metro\Sound Transit operating their snow plows in Seattle and what areas are being targeted? **(Metro)**
- Is SDOT maintaining routes (as supported in the Plan) as requested by Metro\Sound? **(SDOT)**
- What “stage” is Metro\Sound Transit operating as identified in their plan? **(Metro)**

Special Standby Requests

- Are there any needs or requests for buses to serve as warming shelters? (Apartment/building fire housing # of people, etc.) **(Metro)**
- Are there any needs or requests for buses to support evacuation operations? **(Metro)**

Emergency Requests for SDOT Assistance (Metro)

- How many and types of requests?
- Maintain list of pending requests and type of need.
- Identify any significant delays in completing these requests.
- Were there any requests turned down because they do not meet the criteria?

ACCESS Vans

- Is ACCESS able to complete all service requests? **(Metro)**
 - For unfulfilled requests, what is the nature of those requests, and is ACCESS continuing to attempt to solve the problem?
 - Are there any unfulfilled requests for life safety services?

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- Is ACCESS experiencing a surge in requests for service from new, unregistered customers and how is that surge being handled? (**Metro**)

Light Rail and Commuter Rail (EOC Planning Section, Situation Unit)

- Is the Link Light Rail or Sounder Commuter system experiencing any decrease in service?
- Have any modifications been made in service levels and hours?

Railroads (EOC Planning Section, Situation Unit)

- Are all rail systems working and freight services operational? (i.e., Amtrak, BNSF, etc.)

Intercity Bus Service (EOC Planning Section, Situation Unit)

- Is Greyhound operating at full service? If not, what modifications are occurring?
- Are they dealing with customer care issues and temporary bus housing?
- When will Greyhound return to normal service levels?

Interstates

- What is the roadway status of major State and Federal routes and highways (focus on I-5, I-405, I-90, SR-520 routes surrounding/adjacent to Lake Washington) (**EOC Planning Section, Situation Unit**)
 - Have any restrictions been put in place? (Traction tires, certain hours/avalanche control, etc.)
- Are the Express Lanes operating on schedule and/or any modifications of operation anticipated? (**SDOT**)

County and Neighboring Jurisdictions Roadways (EOC Planning Section, Situation Unit)

- What is the roadway status of key neighboring jurisdictional and county?

School Systems & Student Transport

- Has the school system completed student transport? If not, when? (**Seattle Public Schools & Private Schools**)
- Are there any students stranded at bus stops or on bus routes? (**Metro\Seattle Public Schools**)
- Is there a need for sheltering students who are stranded at bus stops or on buses? (**Metro\Seattle Public Schools**)
- Identify any of the stranded students who have special circumstances (such as medication needs or in a wheelchair). (**Metro\Seattle Public Schools**)

Power Outages (SCL)

- Has City Light's system experienced any power outages?
 - Identify the outage area and how many affected (residential / business).
 - Provide estimated time of restoration and if there are any complications.
- Are any outages affecting critical infrastructure or health care facilities?
 - Has Public Health been notified?

Water, Waste Water and Solid Waste (SPU)

- Has SPU experienced any interruptions to services?
 - Identify the outage area and how many affected (residential / business).
 - Is SPU providing "customer care" to impacted customers?
 - Provide estimated time of restoration and if there are any complications.
- Are any outages affecting critical infrastructure or health care facilities?

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- Has Public Health been notified?
- Number of reports of private water line breaks
- How are garbage collection services impacted and what modifications in service delivery are being made?
- Are there any landslide activities occurring and what are the impacts (city property, private property, utilities, roadways, etc.)?

Shelters (HSD)

- Are “Severe Weather Shelters” in operation?
 - How many individuals are using the shelters?
 - What are the location and hours of operation?
 - Have any modifications been made to locations and hours?
- Are any human services providers experiencing impacts? Is any assistance needed?
- Are any other case management/sheltering concerns occurring and being coordinated? (home fires, ARC responses, etc.)

Weather (EOC Planning Section, Situation Unit)

- What is the current National Weather Service forecast?
- When is the next National Weather Service webinar?
- What is the Weather Net, RainWatch perspective?
- What is SDOT, SPU SCL interpretation of the forecast?
- What are local television news stations forecasting?

Airport Operations (EOC Planning Section, Situation Unit)

- Is Seattle-Tacoma International Airport fully operational?
 - What is the current level of air service operations?
 - What is the anticipated level of service over the next 24 hours?
- Is the airport sheltering stranded passengers?
 - How many people are “sheltering” at the airport?
 - Are other agencies providing sheltering assistance?
- Do the airlines have sufficient de-icing supplies to maintain full operations?
- Are the driving conditions and light rail service levels keeping traffic moving at the airport?
- Is King County International Airport fully operational?

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Tab C: Information Sources

City of Seattle

- City Home page
<http://www.seattle.gov/>
- Office of Emergency Management (OEM) and access to WebEOC
<http://www.seattle.gov/emergency/>
- Seattle Department of Transportation – Travelers Information Map
<http://web5.seattle.gov/travelers/>
- City Light Outage System
<http://www.seattle.gov/light/sysstat/>
- Seattle Public Utilities
<http://www.seattle.gov/util/>

King County Region

- King County Metro Transit
<http://metro.kingcounty.gov/>
- King County Metro Transit Alerts
<http://metro.kingcounty.gov/signup/index.html>
- Regional Public Information Network
<http://www.rpin.org/rpinweb/>
- Taking Winter by Storm – Education Program
<http://www.govlink.org/storm/>

Other

- National Weather Service
<http://www.wrh.noaa.gov/sew/>
- Regional Public Information Network
<http://www.rpin.org/rpinweb/>
- Washington State Department of Transportation
<http://www.wsdot.wa.gov/traffic/seattle/>
- Rain Watch
<http://www.atmos.washington.edu/SPU/>

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Tab D: Snowstorm Initial Planning Meeting Agenda

1. Introduce meeting participants
2. Opening remarks, review\modify agenda
3. Review weather forecast
 - Advise on when next webinar is scheduled
4. Identify potential impacts and Customer Care issues
 - Ability to maintain fire, police, hospital services
 - Utilities
 - Human Services
5. Identify actions currently underway
 - Cold weather shelters operating or planned
 - Pretreatment of streets
 - Anticipated Metro service level during storm (if known)
6. Establish operational objectives
 - Update standing EOC objectives as needed
7. Define operational strategy
 - Road maintenance plan
 - Define EOC and DOC activation schedule
 - Establish reporting cycle
 - Review and update Essential Elements of Information
8. Determine resource needs
 - Haller Lake/Charles Street hours of operation
 - Define reporting process for expendables (wiper blades, washer fluid, salt for sidewalks etc..)
9. Establish plan to coordinate public messaging
 - See attached public messaging plan
10. Identify policy issues
11. Address procedures for reimbursement of costs

Materials and Documents Needed for Meeting

1. Computer
2. Projection Screen
3. Snow\Ice service level maps; citywide and by district
4. Copy of weather forecast
5. Notepads and pens

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Tab E: Seattle Department of Transportation Snow Response Maps
See attached PDF Documents